DENMARK IN THE U.S. — trade, jobs and investments
INTRODUCTION

Denmark and the United States share the same goal: Creating growth and jobs in a world where the wealth of our countries increasingly depends on trade and innovation, and where exports and foreign direct investment play a key role in our economy and future prosperity.

Denmark is a small country, yet the Danish economy and its private sector are geared toward markets abroad. A key focus is the U.S. which is Denmark’s largest trading partner outside the European Union. Exports to the U.S. represent more than $14 billion, which are the foundation of investments, growth and job creation.

There are more than 650 Danish companies based in the U.S., concentrated in – but not limited to – 10 states. Danish companies employ more than 60,000 people in the U.S., positively impacting growth and local employment.

The economic potential between our two countries is promising. In several sectors, Denmark – and Danish companies – have the expertise, advanced products and solutions that are in high demand in the U.S. The goal is to unlock this market potential, helping the American people and businesses benefit from Danish exports and investments.

This publication examines the contribution of Danish companies to the U.S. economy in trade and job creation. It highlights key sectors where Danish companies are global leaders and where opportunities should be explored for the mutual benefit of our economies.

It is our hope that this publication will contribute to the continual development and capitalization of this great potential.

Karsten Dybvad
CEO,
Confederation of Danish Industry

Lars Gert Lose
Ambassador of Denmark to the United States of America
Danish companies in the U.S. employ more than 60,000 people.
CLOSE ECONOMIC TIES BETWEEN U.S. and Denmark

The U.S. economy is not only the world’s largest – it also moves confidently ahead. The fact that the U.S. has experienced six consecutive years of economic growth and the lowest unemployment rate since February 2008 are evidence of its strength.

These encouraging trends point to the structural strengths of the U.S. economy. The U.S. also has a higher population growth rate than most developed economies. Fuelled by low energy prices, growth in the U.S. economy is likely to remain strong for years to come.

The promise of the U.S. as the “land of opportunities” remains as strong as ever and continues to drive Danish companies in the American market. Total Danish exports of goods and services to the U.S. in 2015 amounted to more than $14.7 billion.

Danish investments in the U.S. are also on the rise. By the end of 2014, foreign direct investment to the U.S. by Danish companies amounted to $12.5 billion. In 2013, Danish companies in the U.S. employed more than 60,000 people. A recent analysis by the Confederation of Danish Industry and the Embassy of Denmark to the U.S shows that the number of Danish companies with subsidiaries in the U.S. rose by 35 percent since 2013.

Danish companies are global leaders in a number of growing sectors that attract increased interest from private and government entities. These sectors are outlined and explored in depth in the following pages of this publication.

KEY MACROECONOMIC NUMBERS ON THE U.S. AND DENMARK

<table>
<thead>
<tr>
<th></th>
<th>U.S.</th>
<th>Denmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (in millions)</td>
<td>319</td>
<td>5.6</td>
</tr>
<tr>
<td>GDP (billion USD)</td>
<td>17,419</td>
<td>342</td>
</tr>
<tr>
<td>GDP per capita (USD)</td>
<td>54,600</td>
<td>60,700</td>
</tr>
</tbody>
</table>

Source: World Bank (data for 2014)
TRADE, JOBS AND INVESTMENTS BETWEEN THE U.S. AND DENMARK

$7.8 billion
U.S. exports to Denmark

$12.5 billion
Danish FDI in the U.S.

657 Danish companies
create 60,179 jobs
in the U.S.

Source: Statistics Denmark and U.S. Department of Commerce

KEY SECTORS FOR DANISH COMPANIES IN THE U.S.

1. RENEWABLE ENERGY
In the field of energy, Danish companies attract growing global attention, particularly in the fields of renewable energy technologies and energy efficient solutions.

2. ENVIRONMENTAL TECHNOLOGIES
Denmark is also world leader in environmental technologies, including water treatment technologies.

3. SHIPPING
Denmark is a proud maritime nation and home to leading companies in the shipping industry.
Healthcare and life science is the leading export sector in goods from Denmark, particularly pharmaceuticals and medical technologies.

Food and agriculture, such as meat processing, dairy products and organic agriculture are a Danish strong-hold.

A number of key Danish companies are highly specialized in the defense industry, in areas such as radar systems, electronic warfare and aircraft technologies.

The U.S. is Denmark’s most important export market outside the EU. Foreign direct investment in the U.S. by Danish companies has steadily increased in recent years.

$14.7 billion Danish exports to the U.S.

$14.1 billion U.S. FDI in Denmark

530 U.S. companies create 38,956 jobs in Denmark
Top 10 States in the U.S. Where Danish Businesses are Active and Growing

COLORADO
3,487 jobs
Sectors that create most jobs:
- Energy & Environment
- Services
- Transportation, Logistics & Shipping

CALIFORNIA
4,840 jobs
Sectors that create most jobs:
- Healthcare & Life Sciences
- Transportation, Logistics & Shipping
- Fast Moving Consumer Goods

ARIZONA
1,540 jobs
Sectors that create most jobs:
- Services
- Consultancy
- Slow Moving Consumer Goods

TEXAS
5,116 jobs
Sectors that create most jobs:
- Services
- Transportation, Logistics & Shipping
- Energy & Environment

Source: Analysis by the Embassy of Denmark to the U.S and Confederation of Danish Industry
MINNESOTA
1,694 jobs
Sectors that create most jobs:
• Healthcare & Life Sciences
• Machinery, Manufacturing and Engineering
• Services

NEW YORK
1,384 jobs
Sectors that create most jobs:
• Services
• Consultancy
• Fast Moving Consumer Goods

NEW JERSEY
5,189 jobs
Sectors that create most jobs:
• Healthcare & Life Sciences
• Transportation, Logistics & Shipping
• Services

MARYLAND
1,699 jobs
Sectors that create most jobs:
• Healthcare & Life Sciences
• Machinery, Manufacturing and Engineering
• Fast Moving Consumer Goods

ILLINOIS
2,037 jobs
Sectors that create most jobs:
• Healthcare & Life Sciences
• Machinery, Manufacturing and Engineering
• Fast Moving Consumer Goods

NORTH CAROLINA
2,471 jobs
Sectors that create most jobs:
• Healthcare & Life Sciences
• Transportation, Logistics & Shipping
• Services
Renewable energy can help America achieve energy independence, sustain economic growth and create thousands of jobs. Over the past 40 years, Denmark has proven that "going green" is possible – and profitable. Since 1980, Denmark has transitioned to a green economy, while experiencing strong economic growth. Energy consumption has remained more or less constant in the same period. A remarkable lesson from the Danish experience is that economic growth and green energy policies are compatible.

As a first-mover, Denmark has become the world’s hub of wind energy technology, hosting some of the industry’s largest companies. Today, wind energy plays a pivotal role in the Danish energy mix providing 42 percent of the electricity consumed in 2015. Furthermore, wind is supplementing fossil fuels without compromising stability of the electric grid. Contrary to common belief, wind is an inexpensive source of energy. According to the U.S. Energy Information Agency (EIA), construction of new wind energy in the U.S. is cheaper than coal, conventional gas plants and nuclear energy.

DISTRICT HEATING
The Nordic climate has made district heating a necessity in Denmark. The heating provided to Danish cities is primarily waste heat (surplus heat) from power stations and waste incineration plants located near the cities. Many of these have been converted from firing coal to sustainable biomass. Today, 63 percent of the Danish population have their heating demand covered by district heating, with a goal to reach 75 percent within a couple of years. In the U.S., district energy solutions are ideally-suited for American universities, military bases and cities. Aside from biomass, today’s district energy systems incorporate a large amount of solar thermal energy. In the future, the integration of wind energy into the district energy systems through large heat pumps is expected to be significant. The goal is an energy supply that is 100 percent renewable.

INVESTING AND GROWING IN THE U.S.
Renewable energy creates a large number of jobs. Today, 724,000 Americans are working with renewable energy, and the sector continues to grow at an impressive pace. The U.S. Department of Energy estimates that wind energy alone can create more than 600,000 jobs in the U.S. by 2050. All the large Danish companies in the field of renewable energy are present in the U.S. They contribute significantly to the jobs created in this sector. In Colorado, for example, more than 3,000 jobs are supported by Danish wind companies. The U.S. commitment to transition towards more renewable energy will have a positive impact on the number of Danish companies in this sector – and their investments in the U.S. – in the years to come.
In the Danish city of Aarhus, a treatment plant has successfully applied new technology to use wastewater as a source of energy.
ENVIROMENTAL TECHNOLOGIES

WATER
Denmark is surrounded by water, yet fresh water is still a scarce resource. For four decades, Denmark has been rethinking water and building expertise in water protection and efficiency. Today, the harbor of the capital city, Copenhagen, is so clean that it is used for swimming. In the U.S., the scarcity of water in California and other states has pushed the issue of clean water to the forefront of the political agenda.

The industry is increasingly facing the challenge of local water shortages and decreasing water quality. By implementing solutions that ensure high levels of water efficiency and quality before others, businesses can gain a competitive advantage. For instance, Danish companies have invented technology that makes it possible for companies in the metalworking industry to reuse 95 percent of the water without further treatment.

In the Danish city of Aarhus, a treatment plant has successfully applied new technology to use wastewater as a source of energy. As a result, the treatment plant has not only managed to become energy neutral but, in fact, has become a power plant – producing 30 percent more electricity than it consumes.

CLIMATE ADAPTATION
Climate change is one of the most serious global challenges facing our planet. Climate change will disturb rain patterns, cause floods and droughts and affect human health in urban areas. It will also cause extreme weather conditions with great impact on local infrastructure such as energy, water and food supply. A recent example was “Superstorm Sandy” that had a devastating impact and caused $65 billion worth of damages and economic loss.

Denmark is a global leader within the field of "adaptation". After a torrential downpour, Copenhagen decided to build one of the world’s first climate resilient neighbourhoods. Streets were turned into ”cloudburst boulevards” that channel rainwater directly into the harbor. Town squares were reshaped, replacing asphalt with hilly grass carpets that can absorb rain and collect water from the roofs of the surrounding buildings.

INVESTING AND GROWING IN THE U.S.
Climate adaptation has become a driver for innovative solutions, green growth and job creation – also in the U.S. For instance, New York City is investing billions of dollars in an ambitious plan to make the city more resilient and liveable. Inspired by the Danish example, New York City has entered a partnership with the City of Copenhagen to create its first climate resilient neighborhood. In another example, Danish companies have established a Water Technology Alliance in the U.S., to develop solutions for water scarcity as well as excess water. In Chicago, the alliance focuses on water treatment technologies, while in California the challenge is to ensure high quality drinking water. As climate change affects the U.S. in years to come, the number of Danish cleantech companies – and their investments – are likely to grow.
SHIPPING

Denmark is a leading maritime nation and home to a large and modern maritime cluster. Globally, Denmark is known for its quality shipping and promotion of high standards in maritime health, safety and environmental protection, combined with high commercial competitiveness.

MARITIME CLUSTERS
Global shipping is the driving force behind the Danish maritime cluster. Yet, maritime Denmark also consists of shipbrokers, ports, logistics companies, shipyards as well as producers of marine equipment and service providers. Moreover, maritime Denmark holds a strong position in supply activities for the offshore industry. Danish producers of marine equipment and ships offer solutions customized to international leaders throughout the maritime world. The industry is well-known for its quality and innovative, high-tech and green solutions.

FOCUS ON THE ENVIRONMENT
Denmark is among the leading countries in the world for environmentally friendly equipment and products for ships and environmentally friendly repairs of ships. Danish shipping companies operate technically advanced container ships and tankers but are also well known in special areas of transport and services such as LNG and LPG tankers, diving vessels, cable layers, dredgers and icebreakers. The U.S. is an important market for Danish shipping, and for exports of Danish services in general. The vast majority of Danish service exports is attributed to the shipping industry. Danish ship owners transport containers, bulk, oil and other liquids to and from America. Danish ship owners are well established in the U.S. with subsidiaries located in New Jersey, Virginia, Texas and Connecticut.

INVESTING AND GROWING IN THE U.S.
Danish shipping companies transport approximately 10 percent of all traded goods globally. Danish maritime companies account for approximately 24 percent of Denmark’s total exports. The U.S. is the second largest market for Danish shipping. On average, a Danish operated ship enters an American port more than 3,000 times a year. The U.S. market will continue to grow as an important export market for Denmark as the U.S. population is expected to grow. The U.S. Department of Transportation estimates that America’s population will grow by 70 million by 2045 and the freight volume will increase by 45 percent.
In 2015, the Danish healthcare and life sciences sector accounted for 25 percent of all Danish exports to the U.S.
HEALTHCARE and Life Science

The Danish healthcare and life sciences sector is the largest of all goods exported to the U.S. In 2015, this sector alone accounted for 25 percent of all Danish exports to the U.S., representing a value of $3.7 billion.

CORNERSTONE OF INNOVATION
The Danish healthcare and life sciences industry, consisting of the pharmaceutical, biotechnology, medical technology, and eHealth sectors, is one of the strongest and most integrated segments of the Danish economy. Recognized internationally for innovative products and services, Danish companies are global leaders in the treatment of diseases such as diabetes, depression, Alzheimer’s, skin disorders and allergies as well as cluster leaders in Medtech such as hearing aids, disposable devices and eHealth.

MEDTECH
Driven by innovation and known for rapid development from idea to finished product, the Danish MedTech segment holds a solid global position in disposable devices, instruments, implants, regents and hearing aids – with more than 40 percent of the world’s hearing aids being developed and manufactured by three Danish companies. Expertise and application across sectors is evidenced by the growth in robotics, point-of-care sensor technology, diagnostics as well as unique rehabilitation care equipment and services.

e-HEALTH/HEALTH IT
Denmark’s early adaptation and digitalization across sectors and systems has facilitated the country’s leadership in telemedicine and “big data” analysis, resulting in international standard setting in eHealth records, telehealth and the linkage of registries, databases and biobanks in precision medicine.

INVESTING AND GROWING IN THE U.S.
Danish healthcare and life science companies have exported products to the U.S. for more than a century, and, as demand has grown for products and services, so have investments. Today, more than 50 Danish companies have offices in 20 states generating 12,000 jobs. At an estimated $3 trillion, the state of the U.S. healthcare sector is strong – and growing – and so are Danish investments. From recent announcements to expand manufacturing operations, to the establishing of new subsidiaries, Danish healthcare and life science companies continue to pursue growth and investment in the U.S.
The Danish agricultural industry has a long tradition of producing excellent quality products and food based on sustainable production.
FOOD AND Agriculture

FOOD & AGRICULTURE
The Danish food and agricultural industry has one of the most efficient and highly developed productions in the world, leading in green solutions. The industry has a long tradition of providing products of excellent quality with food safety based on a sustainable production. The Danish food cluster is known for its “farm to fork” approach which, over the years, has led to innovation and business development in the sector.

MORE WITH LESS
As a small country with a very intensive agricultural production, decoupling agricultural production and environmental impact is of utmost importance. Denmark produces three times more food than its 5.6 million inhabitants consume. As a world leader in sustainable, intensive food production, the production of agricultural products in Denmark has grown steadily over the years. At the same time, the sector has reduced its overall environmental impact by reducing water consumption, greenhouse gasses, nitrogen and phosphorus surplus as well as ammonia loss. Denmark is a net exporter of food and agricultural products. Danish exports to the U.S. primarily consist of pork, dairy, seafood, ingredients and enzymes. However, agro-tech and machines used in agricultural production are also an important part of the sector exports.

INVESTING AND GROWING IN THE U.S.
In 2014, the U.S. imported Danish food and agricultural products amounting to approximately $787 million. Local presence and local production in export markets is a key focus and integrated part of Danish business in the U.S. Approximately 40 Danish food and agricultural companies have production or sales offices in the U.S. located in more than 20 states. Danish food and agricultural companies are expected to see a steady growth in the U.S. As the American consumer demands for natural and healthy products increase, Danish companies and their focus on food security, quality and superior taste are placed in a strong position for growth.

DEVELOPMENT IN AGRICULTURAL PRODUCTION AND ENVIRONMENTAL IMPACT (1990–2014)

<table>
<thead>
<tr>
<th>Year</th>
<th>Greenhouse gases</th>
<th>Ammonia loss</th>
<th>Phosphorus – diffuse</th>
<th>Nitrogen – diffuse</th>
<th>Phosphorus surplus</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1995</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>2000</td>
<td>140</td>
<td>140</td>
<td>140</td>
<td>140</td>
<td>140</td>
<td>140</td>
</tr>
<tr>
<td>2005</td>
<td>160</td>
<td>160</td>
<td>160</td>
<td>160</td>
<td>160</td>
<td>160</td>
</tr>
<tr>
<td>2010</td>
<td>180</td>
<td>180</td>
<td>180</td>
<td>180</td>
<td>180</td>
<td>180</td>
</tr>
</tbody>
</table>

Source: State of Green
A long history of commitment to environmental solutions and energy efficiency, has placed Danish companies at the forefront of green technology and expertise.
DEFENSE

The U.S. defense industry has taken great strides towards effective and modernized operations. However, challenges remain in energy security, utilizing technological advancements and adapting to contemporary threats – areas in which the Danish defense industry holds relevant competencies and experience.

SOFTWARE
Budget constraints and challenging acquisition programs are the reality faced by the U.S. military as well as many of its allies. Danish companies supply cost effective as well as readily deployable solutions to defense software. These solutions enable allies to operate in multinational deployments and ensure key abilities for information sharing at an international level. Danish defense solutions fit well with the needs of the U.S. military, as Danish companies hold state-of-the-art capabilities that can provide software solutions for command and control, military communication as well as data management.

MARITIME
A modern navy needs to be efficient with strong technological capabilities. The U.S. Navy has, in recent years, outlined objectives for improved energy efficiency and a strengthened fleet. The Danish maritime industry holds valuable knowledge in production, software and design capabilities. Years of experience with sustainable solutions have also made eco-conversion a key competency among Danish maritime companies, resulting in enhancement of naval energy efficiency. Danish expertise and capabilities have translated into improvements in the U.S. Navy as well as local jobs and domestic production.

ENERGY
Improving energy security is a critical objective in order to maintain U.S. national security, enhance combat capability and, in the long run, reduce energy costs. To achieve established objectives, the Department of Defense has put forward a number of initiatives that span across several areas of energy efficiency. Growing from a long history of commitment to green solutions and energy efficiency, Danish companies are at the forefront of green technology and expertise. Several Danish companies in the U.S. support decarbonisation of energy systems in America. These companies have strong solutions that can easily be applied within the defense industry.

RADAR AND SENSOR TECHNOLOGY
In the field of radar systems, Danish companies are global leaders in their capabilities for costal surveillance radars and Doppler radars for ballistic tracking. These systems, incorporated by both NASA and the U.S. armed forces, already contribute to the national security of the U.S. along with sound and vibration measurement systems and a variety of advanced sensor technologies.

INVESTING AND GROWING IN THE U.S.
The innovative and cost-effective Danish solutions in the defense industries are examples of what makes Danish companies unique and attractive. The U.S. defense market is the world’s largest, and with continuing political focus on developing new capabilities and improving efficiency, the market provides ample opportunity for job creation. In the coming years Danish solutions and investments can play an important role in the growth and development.
The strong and growing trade and business relations between the U.S. and Denmark have generated positive results on both sides of the Atlantic. Ranked first in six of the 10 annual editions of Forbes’ “Best Countries for Business”, Denmark is known for a high level of freedom, and a transparent and efficient regulatory climate. This favorable business environment has attracted many American companies to Denmark.

American-owned companies have a strong presence in Denmark with more than 500 subsidiaries. U.S. foreign direct investment in Denmark is valued at over $14 billion and in 2015 total U.S. exports to Denmark amounted to $7.8 billion. Strong and open business relations have increased the flow of capital, goods and services as well as contributed significantly to job creation with American companies employing close to 39,000 people in Denmark in 2013.
Denmark and the U.S. have extensive economic ties. The U.S. is Denmark’s third largest export market – and the largest trade partner outside the European Union. This publication explores the nature of the economic relationship between Denmark and the U.S. as well as outlines key sectors where Danish companies play a significant role.